APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,066	07/17/2001	Antonio Mugica	38146	1266

			EXAMINER
29569	7590	01/15/2004	PATEL, ASHOKKUMAR B

JEFFREY FURR
253 N. MAIN STREET
JOHNSTOWN, OH 43031

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	**Applicant(s)**
Office Action Summary	09/682,066	MUGICA ET AL.
	Examiner	**Art Unit**	
	Ashok B. Patel	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

1.   Application Number 09/682, 066 was filed on 07/17/2001.   Claims 1-16 are

subject to examination.

Specification

3.   The disclosure is objected to because of the following informalities:

a. In Summary of Invention, page 9 of 19, paragraph [0054], line 1, the acronym

"LN" should be "SN". Appropriate correction is required.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

Regarding claims 1-11, it is unclear how the network protocol independency is

achieved as indicted in the preamble of claim 1. Absent such a recitation in the

claims, it is unclear what the intended metes and bounds are. For purpose of

this office action, they will be treated as the claimed device is achieving the

network protocol independence.

Claims 13-16 recites the limitation "computer program product" in first line of the

claim 12. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 101

7.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6 and 12-16 are rejected under 35 U.S.C. 101 because the claimed invention

is directed to non-statutory subject matter where:

Claims 1-6 and 12-16 recite a computer program per se, and are not tangibly embodied

on a computer readable medium.

Referring to claims 7-10, as they are recited they do not result in anything useful.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as

set forth in section 102 of this title, if the differences between the subject matter sought to be

patented and the prior art are such that the subject matter as a whole would have been obvious

at the time the invention was made to a person having ordinary skill in the art to which said

subject matter pertains. Patentability shall not be negatived by the manner in which the invention

was made.

1.   Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Boucher et al. (hereinafter Boucher)(US 6,226,680) in view of Park et al. (hereinafter

Park)(US 5,386,412).

Referring to claim 1,

The reference teaches Boucher teaches seven processing layer - Open systems Interconnection (OSI) reference model and TCP/IP reference model which essentially employs five of the seven layers of OSI including the physical layer and the application layer (col.1, lines 34-67 and col. 2, lines 1-18). Also, it teaches the protocol processing method resulting in collapsing the layers into a single wide layer. (Col.3, lines 41-45). The reference Boucher fails to teach to establish a multilayered compressed protocol in which the functions of the combined layers are combined into a single protocol layer. The reference Park teaches establishing a multilayered compressed protocol in which the functions of the combined layers are combines into a single protocol layer. (col.3, lines 4-11). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to combine Boucher with Park to establish a multilayered compressed protocol (smart network layer) which interfaces with the physical layer and the application layer. Because, the system of a single wide layer greatly increases the speed of processing and the efficiency of moving the data being communicated as taught by Boucher.

Referring to claims 2 and 6,

The reference Boucher teaches the physical layer with two sub layers, the physical medium which is an interface to the transmission means and the physical transmission layer which handles the transmission of data on a communication means and the physical layer is based in hardware. (col. 1, lines 53-55).

Referring to claims 3 and 5,

The reference Boucher teaches the functions of the layers such as routing by the network layer, load balance and packet transportation by the transport layer and data encryption by the presentation layer. The reference also teaches that the difference between the TCP/IP and OSI reference models where the functions of the session and presentation layers are integrated into adjacent layers. (col. 1, lines 60-67 and col. 2, lines 1-16). The reference Boucher fails to teach to establish a multilayered compressed protocol in which the functions of the combined layers are combined into a single protocol layer. The reference Park teaches establishing a multilayered compressed protocol in which the functions of the combined layers are combines into a single protocol layer. (col.3, lines 4-11, and Fig.3A, element 62). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to combine Boucher with Park to establish a multilayered compressed protocol (smart network layer) with claimed sublevels. Because, it is possible to increase the protocol processing speed by removing the complexities presented by the protocols such as the number of layers as taught by Boucher.

Referring to claim 4,

The reference Boucher teaches that the application layer is serviced by the presentation layer which is part of the smart network layer as described above in claim 1. (col. 2, lines 9-10).

Referring to claim 7,

Claim 7 is the method of the claim 1. Therefore claim 7 is rejected for the reasons set forth for claim 1.

Referring to claim 8,

Claim 8 is the method of the claim 2. Therefore claim 8 is rejected for the reasons set forth for claims 2 and 6 above.

Referring to claims 9 and 11,

Claims 9 and 11 are the methods of the claims 3 and 5. Therefore claims 9 and 11 are rejected for the reasons set forth for claims 3 and 5.

Referring to claim 10,

Claim 10 is the method of the claim 4. Therefore claim 10 is rejected for the reasons set forth for claim 4.

Referring to claim 12,

Claim 12 is a claim to a computer program, which has the interfaces and codes, which performs the steps of the method of claim 7. Therefore, claim 12 is rejected for the reasons set forth in claim 7.

Referring to claim 13,

Claim 13 is a claim to a computer program, which has the interfaces and codes, which performs the steps of the method of claim 8. Therefore, claim 13 is rejected for the reasons set forth in claim 8.

Referring to claims 14 and 16,

Claims 14 and 16 are claims to a computer program, which has the interfaces and codes, which performs the steps of the methods of claims 9 and 11. Therefore, claims 14 and 16 are rejected for the reasons set forth in claims 9 and 11.

Referring to claim 15,

Claim 15 is a claim to a computer program, which has the interfaces and codes, which performs the steps of the method of claim 10. Therefore, claim 15 is rejected for the reasons set forth in claim 10.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (703) 305-2655. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Abp
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JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100